

CLAIMS

1. Coupling arrangement (1, 23, 44) comprising a first clamping ring (10), a second clamping ring (20), and clamping bodies (30) situated radially between the clamping rings 10,20), tone clamping ring is fitted inside the other, concentrically with the axis of rotation (1a, 23a, 44a), and at least a first retainer (15) is provided on at least one of the clamping rings (10, 20), and a second retainer (25) is arranged in a fixed manner in a longitudinal direction of an axis of rotation, the clamping rings (10, 20) and the clamping bodies (30) are held together in a longitudinal direction of the axis of rotation (1a, 23a, 44a) by the retainers (15, 25).
2. Coupling arrangement as in Claim 1, wherein the retainers (15, 25) are spaced apart in the longitudinal direction of the axis of rotation (1a, 23a, 44a), and are fixed to the first clamping ring (10) in the longitudinal direction of the axis of rotation (1a, 23a, 44a) in at least one direction, and each of the retainers (15, 25) at least partially engages the second clamping ring (20) by a segment (17, 21, 31, 33a, 49, 51a) cut out of two other segments (17, 21, 31, 33a, 49, 51a) that point in directions opposite one another, and thus hold the clamping bodies between them, at least partially, on both sides.
3. Coupling arrangement as in Claim 2, wherein the clamping rings (10, 20) are formed sheet metal parts.
4. Coupling arrangement as in Claim 3, wherein at least the first retainer (15) is formed in one piece with the first clamping ring (10).
5. Coupling arrangement as in Claim 4, wherein the first retainer (15) is a lip (16, 28, 47) made of the metal of the first clamping ring (10), and extends at a right angle to the axis of rotation (1a, 23a, 44a).

6. Coupling arrangement as in Claim 2, wherein at least the second retainer (25) is a separate part from the clamping rings (10, 20), and is held longitudinally to the first clamping ring (10) in at least one longitudinal direction of the axis of rotation (1a, 23a, 44a).

7. Coupling arrangement as in Claim 6, wherein the second clamping ring (25) is a perforated cap (18, 29, 48), whereby the perforated cap (18, 29, 48) is located adjacent to the clamping bodies longitudinally in one direction and thereby surrounds the axis of rotation (1a, 23a, 44a).

8. Coupling arrangement as in Claim 7; further comprising at least one tongue (32, 50) protruding from the perforated cap (29, 48), the tongue (32, 50) engages the second clamping ring (20) by the at least one segment (33a, 51a) that is cut out from the cut-out segments (31, 33a, 49, 51a), and which is oriented in one direction of the axis of rotation (23a, 44a).

9. A coupling arrangement (1, 23, 44) comprising: a first clamping ring (10) concentric with an axis of rotation (1a, 23a, 44a); a second clamping ring (20) oriented concentrically with the axis of rotation (1a, 23a, 44a) and grooved around its circumference; and clamping bodies (30) oriented radially between the clamping rings (10, 20), at least the second clamping ring (20) includes a bearing surface (7, 26a, 52), which faces the clamping bodies (30), and includes radial, ramp-shaped projections (9, 38, 53), each of which are positioned between two neighboring clamping bodies (30); and the second clamping ring (20) may be at least be brought into frictional contact with a machine part, and at least a first retainer (15) and a second retainer (25) are connected to one of the clamping rings (10, 20) in at least one longitudinal direction of the axis of rotation (1a, 23a, 44a), thereby holding the

clamping rings (10, 20) and the clamping bodies (30) together longitudinally to the axis of rotation (1a, 23a, 44a) by the retainers (15, 25).

10. Coupling arrangement as in Claim 9, wherein the clamping rings are formed sheet metal parts.

11. Coupling arrangement as in Claim 10, wherein the retainers (15, 25) are spaced apart from each other in a longitudinal direction of the axis of rotation (1a, 23a, 44a), and are fastened to a clamping ring (10, 20) in at least one direction longitudinal to the axis of rotation (1a, 23a, 44a); the retainers (15, 25) engage the other clamping ring (10, 20) by a segment (17, 21, 31, 33a, 49, 51a) cut out from two additional cut-out segments (17, 21, 31, 33a, 49, 51a) that each point in one direction of the axis of rotation (1a, 23a, 44a) and away from one another; and thereby hold the clamping bodies (30) longitudinally between them, at least partially.

12. Coupling arrangement as in Claim 11, wherein at least the first retainer (15) is formed in one piece with the first clamping ring (10).

13. Coupling arrangement as in Claim 12, wherein the first retainer (15) is a lip (16, 28, 47) made from the metal of the first clamping ring (10), and extends from the first clamping ring (10) at right angles to the axis of rotation (1a, 23a, 44a).

14. Coupling arrangement as in Claim 11, wherein at least the second retainer (25) is a separate part from the clamping rings (10, 20), and is held to the first clamping ring (10) in at least one longitudinal direction of the axis of rotation (1a, 23a, 44a).

15. Coupling arrangement as in Claim 14, wherein the second retainer (25) is a perforated cap (18, 29, 48), whereby the perforated cap (18, 29, 48) is located adjacent to the clamping bodies longitudinally in one direction and thereby surrounds the axis of rotation (1a, 23a, 44a).

16. Coupling arrangement as in Claim 15, further comprising at least one tongue (32, 50) protruding from the perforated cap (29, 48), the tongue (32, 50) engages the second clamping ring (20) by at least one cut-out section (33a, 51a) oriented in a direction of the axis of rotation (23a, 44a).

17. Coupling arrangement as in Claim 16, wherein the cut-out segment (33a, 51a) is formed from a recess (33, 51) in the second compression (20) fitting, the recess (33, 51) in a direction from the longitudinal of the axis of rotation (23a, 44a) into the second clamping ring (20).

18. Coupling arrangement as in Claim 11, wherein at least the first retainer (15) is formed as one piece with the first clamping ring, and at least the second retainer (25) is a separate part from the clamping rings (10, 20); the first retainer (10) comprising a lip (16, 28, 47) made from and extending off of the first clamping ring (10) at right angles to the axis of rotation; and the perforated cap holds the clamping bodies (30) longitudinally in one direction of the axis of rotation, and surrounds the axis of rotation (1a, 23a, 44a).

19. Coupling arrangement as in Claim 18, further comprising at least one tongue (32, 50) protruding from the perforated cap (29, 48), the tongue (32, 50) engages the second clamping ring by at least one cut-out segment (33a, 51a) pointing in one direction with the axis of rotation.

20. Coupling arrangement as in Claim 19, wherein the cut-out segment (33a, 51a) comprises a recess (33, 51) in the second clamping ring (20), where the recess (33, 51) extends longitudinally into the second clamping ring (20) in a longitudinal direction of the axis of rotation.

21. Coupling arrangement as in Claim 10, wherein the second clamping ring (20) may be fixed about the axis of rotation (23a, 44a) relative to a machine part (5, 6) by an actuating element (40); the actuating element (40) comprises a recess (33, 51) in the second clamping ring (20) and the recess (33, 51) extends into the second clamping ring (20) from a longitudinal of the axis of rotation (23a, 44a); and where the recess (33, 51) may be pivoted about the axis of rotation (23a, 24) relative to the first clamping ring (10).

22. Coupling arrangement as in Claim 10, wherein the second clamping ring (20) may be fixed about the axis of rotation (1a) relative to a machine part (5, 6) by an actuating element (40) comprising a tongue that formed as one piece with the second clamping ring (20), pointing longitudinally in one longitudinal direction of the axis of rotation, the tongue (13) may be rotated about the axis of rotation (1a) relative to the first clamping ring (10).

23. Coupling arrangement as in Claim 10, where the second clamping ring (20) may be fixed about the axis of rotation (23a, 44a) relative to a machine part (5, 6) by means of an actuator (40), where the actuator (40) is designed separately from the clamps (30), and thereby held longitudinally to the first clamping ring (10) in at least one longitudinal direction of the axis of rotation (44a).

24. Coupling arrangement as in Claim 23, wherein one of the retainers (10, 20) as well as one of the actuating elements (40) on a common perforated cap (48) is designed with a tongue (50) protruding at first radially from the perforated cap; the

perforated cap is held to the first clamping ring (10) in at least one longitudinal direction of the axis of rotation (44a); and the perforated cap (48) holds the clamping bodies (30) longitudinally, surrounding the axis of rotation (44a), whereby the tongue (50) engages the second clamping ring (20) at right angles to the axis of rotation (44a) by a segment (51a) cut out of a recess.

25. Coupling arrangement as in Claim 24, wherein the tongue (50) juts out of the recess and longitudinally over the second clamping ring (20) in its path away from the cut-out segment in a longitudinal direction of the axis of rotation (44a).